WHAT IS CLAIMED IS:

1.   A method for executing a computer system performance analysis, the method comprising the steps of:

first providing a workload specification comprising a set of resource uses;

second providing at least one hardware model, independently defined with regard to the workload specification, comprising hardware performance information;

third providing a configuration defining system components and including a reference to the hardware model; and

applying the configuration to the workload specification to render performance data, wherein the applying step comprises referencing the hardware model to render hardware performance information corresponding to an event derived from the set of resource uses.

2.   The method of claim 1 wherein the third providing step comprises:

creating the configuration from a script independently designated with respect to the workload specification.

3.   The method of claim 2 further comprising the step of:

providing an extensible schema defining a set of syntactic rules under which the script is formulated.

4.   The method of claim 3 further comprising extending the set of syntactic rules according to definitions specified for the hardware model.

5.   The method of claim 2 wherein the configuration comprises an XML script.

6.   The method of claim 1 wherein the hardware performance information comprises a modeled delay associated with an identified event.

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7.   The method of claim 6 wherein the identified event comprises a communication event.

8.   The method of claim 1 further comprising rendering an output trace in a component-specific format, the rendering step comprising:

defining a standard output trace format;

extending the standard output trace format to support component-specific traces associated with the hardware model; and

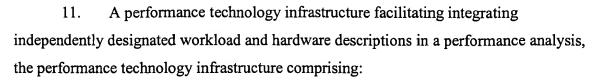integrating standard output traces with hardware-specific traces.

9.   The method of claim 8 wherein output trace formats are specified by XML schemas.

10.   The method of claim 1 further comprising the steps of:

providing a set of user-specifiable instructions for controlling evaluation of a sub-set of a list of events associated with a workload specification.

11.   A performance technology infrastructure facilitating integrating independently designated workload and hardware descriptions in a performance analysis, the performance technology infrastructure comprising:

a workload specification interface;

5   a hardware model interface;

a component configuration database; and

an evaluation engine comprising an augmentable program structure including:

a set of slots for receiving a workload specification via the workload specification interface, and a component configuration from the component

10   configuration database, wherein hardware model performance data corresponding to devices specifiable within the component configuration is retrieved from at least one hardware model via the hardware model interface.

12.   The performance technology infrastructure of claim 11 wherein the

15   component configuration is specified in the form of a script, and wherein the script is independently designated with respect to the workload specification.

13.   The performance technology infrastructure of claim 12 further comprising an extensible configuration schema defining a set of syntactic rules under which the script

20   is formulated.

14.   The performance technology infrastructure of claim 13 further comprising a program architecture facilitating extending the set of syntactic rules according to definitions specified for the hardware model.

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15.   The performance technology infrastructure of claim 12 wherein the configuration comprises an XML script.

16.   The performance technology infrastructure of claim 11 wherein the

30   hardware performance information comprises a modeled delay associated with an identified event.

17.   The performance technology infrastructure of claim 16 wherein the identified event comprises a communication event.

5   18.   The performance technology infrastructure of claim 11 further comprising an output trace generator for rendering an output trace in a component-specific format, the generator comprising routines for facilitating performing the steps of:

defining a standard output trace format;

extending the standard output trace format to support component-specific traces

10   associated with the hardware model; and

integrating standard output traces with hardware-specific traces.

19.   The performance technology infrastructure of claim 18 wherein output trace formats are specified by XML schemas.

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20.   The performance technology infrastructure of claim 11 further comprising:

a set of user-specifiable instructions for controlling evaluation of a sub-set of a list of events associated with a workload specification.

21.   A computer-readable medium having computer executable instructions for executing a computer system performance analysis, the steps including:

first providing a workload specification comprising a set of resource uses;

second providing at least one hardware model, independently defined with regard to the workload specification, comprising hardware performance information;

third providing a configuration defining system components and including a reference to the hardware model; and

applying the configuration to the workload specification to render performance data, wherein the applying step comprises referencing the hardware model to render hardware performance information corresponding to an event derived from the set of resource uses.

22.   The computer-readable medium of claim 21 wherein the third providing step comprises:

creating the configuration from a script independently designated with respect to the workload specification.

23.   The computer-readable medium of claim 22 further comprising computer executable instructions for performing the step of:

providing an extensible schema defining a set of syntactic rules under which the script is formulated.

24.   The computer-readable medium of claim 23 further comprising computer executable instructions for performing the step of:

extending the set of syntactic rules according to definitions specified for the hardware model.

25.   The computer-readable medium of claim 22 wherein the configuration comprises an XML script.

26.   The computer-readable medium of claim 21 wherein the hardware performance information comprises a modeled delay associated with an identified event.

27.   The computer-readable medium of claim 26 wherein the identified event comprises a communication event.

28.   The computer-readable medium of claim 21 further comprising computer executable instructions for rendering an output trace in a component-specific format, the rendering step comprising:

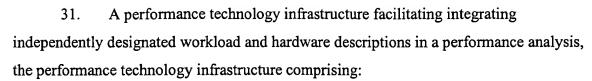defining a standard output trace format;

extending the standard output trace format to support component-specific traces associated with the hardware model; and

integrating standard output traces with hardware-specific traces.

29.   The computer-readable medium of claim 28 wherein output trace formats are specified by XML schemas.

30.   The computer-readable medium of claim 21 further comprising computer executable instructions for supporting an evaluation control interface for receiving a set of user-specifiable instructions for controlling evaluation of a sub-set of a list of events associated with a workload specification.

31.   A performance technology infrastructure facilitating integrating independently designated workload and hardware descriptions in a performance analysis, the performance technology infrastructure comprising:

a workload specification interface;

a hardware model interface;

a component configuration database; and

an evaluation engine including a set of slots for receiving a workload specification via the workload specification interface, and for receiving a component configuration from the component configuration database, wherein hardware model performance data corresponding to devices specifiable within the component configuration is retrieved from at least one hardware model via the hardware model interface.